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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/177,251	10/22/1998	ERIC C. ANDERSON	1062P/P180	2859

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EXAMINER

HARRIS, TIA M

ART UNIT PAPER NUMBER

2615

DATE MAILED: 05/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

cd

Office Action Summary

Application No.

09/177,251

Applicant(s)

ANDERSON, ERIC C.

Examiner

Tia M Harris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Specification***

1. The disclosure is objected to because of the following informalities: CPU is part (344) not (244) (Page 6, Line 1), Parts 410 (a/b) and 411 (a/b) are not described in the spec (Fig. 2A), term "relative" should be "relatively" (Page 10, Line 22), object (503) should be changed to object (502) (Page 11, Line 12), step (608) in the spec is labeled as step (606) in the drawing (Page 12, Lines 15 and 17), term "to" should be inserted between "close" and "the" (Page 13, Line 21), term "The" should be "Then" (Page 15, Line 10), sentence is repeated (Page 15, Lines 15-17), an extra space has been inserted between sentences (Page 16, Line 10), and an extra period has been inserted after "foreground 554" (Page 17, Line 5).

Appropriate correction is required.

Drawings

2. The drawings are objected to because the computer is not labeled as part (118) (seems to be labeled as part (110) which is the camera (Page 5, Lines 9-10; Fig. 1), line (366) is not labeled in Fig 1 (Page 6, Line 18), not clear according to step 620 (Fig 5) if objects are to be in or out of focus (in view of spec Page 15), and the second step 710 (Fig 7) should be labeled as step 732 (Capture image...). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

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claim(s) in independent form. Claim 8 seems to say the same thing as Claim 7 from which is depends. There is no further limitation in Claim 8.

4. Claim 10 objected to because of the following informalities: the second use of the term "image" should be removed (line 1). Appropriate correction is required.

5. Claim 17 is objected to because of the following informalities: term "of" should be inserted between "shifting" and "the focus zone" (line 3). Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 4-8, 10-11, and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al (6067114) (hereafter referred to as Omata) in view of Ikemori (4826301).

Omata discloses a method for capturing an image using an image capture device (Col 3, Lines 9-20), the image capable of including a plurality of objects (see Fig 5), each of the plurality of objects being a corresponding distance from the imaging device (Col 5, Lines 8-10, 16-17), the image being associated with a focus zone (Col 3, Lines 60-62; Col 5, Lines 18-21), the method comprising the steps of determining if the image matches at least one criteria by determining the corresponding distance for each of the plurality of objects (Col 5, Lines 8-10, 18-21), determining whether at least one of the plurality of objects is out of focus if the image matches the at least one criteria and shifting the focus zone by focusing the image on a selected main object (Col 4, Lines 12-15). Omata does not specifically disclose shifting the focus zone so at least one object is out of focus.

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Ikemori discloses a photographic system having a soft focus function wherein the focus zone is shifted so at least one object is out of focus (Col 11, Lines 34-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the method of shifting the focus zone so at least one object is out of focus in the invention disclosed by Omata, as taught by Ikemori, to produce a special effect such as soft focus on the background of the image, which is well known in the art, so the main object (foreground image) would appear sharper.

Omata discloses the step of determining if an image matches at least one criterion by determining the corresponding distance for each of the plurality of objects (Col 5, Lines 8-10, 16-20).

Omata further discloses separating the image into a plurality of zones and analyzing the image in each of the plurality of zones to determine if the image matches the criteria (Col 3, Lines 34-35; Col 5, Lines 5-10, 18-21).

Omata further discloses determining the amount of each zone and a number of zones, which a particular object occupies (Col 5, Lines 55-67; Col 6, Lines 1-9).

Omata further discloses the image includes a center and at least one criterion includes a location of a particular object of the plurality of objects being in proximity to the center of the image (Col 4, Lines 25-29).

Omata also discloses the image capture device is a digital camera (Col 3, Lines 9-17).

Omata further discloses a computer-readable medium containing a program for capturing an image capable of a plurality of objects, the program includes instructions for controlling the devices that determine if an image matches at least one criterion, determine whether at least one of the plurality of objects is out of focus, and shift the focus zone so the at

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least one object is out of focus if at least one of the plurality of subjects is not out of focus (Col 3, Lines 54-67).

8. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al (6067114) in view of Ikemori (4826301) as applied to claim 2 above, and further in view of Nagahata et al (5825016) (hereafter referred to as Nagahata).

The combined invention of Omata in view of Ikemori, discloses a method of capturing an image containing a plurality of objects, as discussed above. Both references disclose focusing on the background or foreground of an image (Omata – Col 1, Lines 24-28; Ikemori – Col 7, Lines 40-41), but do not specifically disclose categorizing the objects of an image as being located in the foreground or background of an image based on corresponding distances.

Nagahata discloses a focus detection device that can be used to capture an image containing a plurality of objects (see Fig 5). It is disclosed that the object, which is farther away from the camera, is considered to be in the background, and the object that is closest to the camera is considered to be in the foreground (Col 7, Lines 60-67; Col 8, Lines 1-5).

It is very well known in the art that an object farther away from a camera is considered to be in the background of an image, and an image closer to the camera would be considered to be in the foreground of the image. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that since the cameras disclosed by Omata and Ikemori are both capable of capturing an image containing a plurality of objects, they would determine whether an object is in the foreground or background of an image based on the distances the objects are from the camera, in the manner taught by Nagahata, so the desired focusing of the objects in the image (such as soft focusing) could be correctly performed.

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9. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omata et al (6067114) in view of Ikemori (4826301) and Nagahata et al (5825016).

Omata discloses a method for capturing an image using an image capture device (Col 3, Lines 9-20), the image capable of including a plurality of objects (see Fig 5), each of the plurality of objects being a corresponding distance from the imaging device (Col 5, Lines 8-10, 16-17), the image being associated with a focus zone (Col 3, Lines 60-62; Col 5, Lines 18-21), the method comprising the steps of determining if the image matches at least one criteria by determining the corresponding distance for each of the plurality of objects (Col 5, Lines 8-10, 18-21), determining whether at least one of the plurality of objects is out of focus if the image matches the at least one criteria and shifting the focus zone by focusing the image on a selected main object (Col 4, Lines 12-15). Omata further discloses a computer-readable medium containing a program for capturing an image capable of a plurality of objects, the program includes instructions for controlling the devices that determine if an image matches at least one criterion, determine whether at least one of the plurality of objects is out of focus, and shift the focus zone so the at least one object is out of focus if at least one of the plurality of subjects is not out of focus (Col 3, Lines 54-67). Omata does not specifically disclose shifting the focus zone so at least one object is out of focus.

Ikemori discloses a photographic system having a soft focus function wherein the focus zone is shifted so at least one object is out of focus (Col 11, Lines 34-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the method of shifting the focus zone so at least one object is out of focus in the invention disclosed by Omata, as taught by Ikemori, to produce a special effect such as soft focus on the background of the image, which is well known in the art, so the main object (foreground image) would appear sharper.

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Omata discloses the step of determining if an image matches at least one criterion by determining the corresponding distance for each of the plurality of objects (Col 5, Lines 8-10, 16-20).

Omata further discloses separating the image into a plurality of zones and analyzing the image in each of the plurality of zones to determine if the image matches the criteria (Col 3, Lines 34-35; Col 5, Lines 5-10, 18-21).

Omata further discloses determining the amount of each zone and a number of zones, which a particular object occupies (Col 5, Lines 55-67; Col 6, Lines 1-9).

Omata further discloses the image includes a center and at least one criterion includes a location of a particular object of the plurality of objects being in proximity to the center of the image (Col 4, Lines 25-29).

The combined invention of Omata in view of Ikemori, discloses a method of capturing an image containing a plurality of objects, as discussed above. Both references disclose focusing on the background or foreground of an image (Omata – Col 1, Lines 24-28; Ikemori – Col 7, Lines 40-41), but do not specifically disclose categorizing the objects of an image as being located in the foreground or background of an image based on corresponding distances.

Nagahata discloses a focus detection device that can be used to capture an image containing a plurality of objects (see Fig 5). It is disclosed that the object, which is farther away from the camera, is considered to be in the background, and the object that is closest to the camera is considered to be in the foreground (Col 7, Lines 60-67; Col 8, Lines 1-5).

It is very well known in the art that an object farther away from a camera is considered to be in the background of an image, and an image closer to the camera would be considered to be in the foreground of the image. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that since the cameras disclosed by

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Omata and Ikemori are both capable of capturing an image containing a plurality of objects, they would determine whether an object is in the foreground or background of an image based on the distances the objects are from the camera, in the manner taught by Nagahata, so the desired focusing of the objects in the image (such as soft focusing) could be correctly performed.

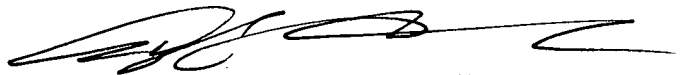
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tia M Harris whose telephone number is 703-305-4807. The examiner can normally be reached on M-F 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

tmh 
May 14, 2002



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